# ExpressBus<sup>™</sup> Plus User Manual



P73213-A

F5U012

### Introduction

Thank you for purchasing the Belkin Components ExpressBus<sup>™</sup> Plus! Now you have even more connectivity without the headache of configuring cables, switches, or complicated software and hardware setups. With the ExpressBus<sup>™</sup> Plus, you can add three more USB ports, a parallel printer port, and a serial (RS232) port, all from one cable. Simply plug it in, pop in the floppy disk, and you're done! You don't even have to reboot. Requires Windows<sup>®</sup> 98.

#### Package Contents

(1) ExpressBus <sup>™</sup> Plus	F5U012
(1) USB Device Cable 6 ft. (1.8m)	F3U133-06
(1) Power Adapter	
5 V DC, 2.0A	
Registration Card	P72009
Software Driver Diskette	
This Manual	

# **Product Detail**



### Hardware Installation

 Plug the Power Adapter into a wall outlet, and the other end into the Power Jack of the ExpressBus<sup>™</sup> Plus.



 Plug in the included USB Device Cable to the USB port of your PC. This end of the cables has the flat connector.





 Plug in the other end of the cable into the upstream port of the ExpressBus<sup>™</sup> Plus. This end of the cable has a more square shape. The first LED will light up in green.



At this point, a message in Windows® 98 should appear saying "New Hardware Found".

# Software Installation

#### Windows® 98 Driver Installation

- 1. Windows® will detect "Generic USB Hub". Click "Next".
- 2. Leave on "Search" and click "Next".



3. Uncheck everything and click "Next".



Windows<sup>®</sup> may prompt you to insert a Windows<sup>®</sup> 98 installation CD. If so, insert the installation CD into your CD-ROM drive and follow the system prompts.

- 4. Windows® will find the driver for "Generic USB Hub". Click "Next".
- 5. Windows® will install the Generic USB Hub driver. Click "Finish".
- 6. Windows® will detect "USB Ver 1.1 Device". Click "Next".
- Leave on "Search for the best driver for your device (Recommended)".
- 8. Select the "Floppy Disk Drives" box, make sure your Belkin Windows® 98 Driver Installation diskette has been inserted into your floppy disk drive, and click "Next".



- Windows<sup>®</sup> will find the drivers for "Belkin F5U012(P) USB Bay Serial Interface Controller". Click "Next".
- 10. Windows<sup>®</sup> will install the Belkin F5U012(P) USB Bay Serial Interface Controller driver. Click "Finish".
- 11. Windows® will detect "Unknown Device". Click "Next".
- 12. Leave on "Search for the best driver for your device (Recommended)" and click "Next".

13. Select the "Floppy Disk Drives" box, make sure your Belkin Windows<sup>®</sup> 98 Driver Installation diskette is still inserted into your floppy disk drive and click "Next".

Add New Hardware Wi	zard	
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.	
	Floppy disk drives	
	□ D ROM drive	
9. L	Microsoft Windows Update	
	E Specify a location:	
1 × 1	¥ /2	
	Hereiter .	
	<back next=""> Cancel</back>	

- 14. Windows<sup>®</sup> will find the drivers for "Belkin F5U012(P) USB Bay Parallel Interface Controller". Click "Next".
- 15. Windows<sup>®</sup> will install the Belkin F5U012(P) USB Bay Parallel Interface Controller driver. Click "Finish".
- 16. Windows® will detect "Serial on USB Port" and install the driver automatically.

Driver installation is now complete.

#### Windows® 98 SE Driver Installation

- 1. Windows® will detect "USB Ver 1.1 device". Click "Next".
- 2. Leave on "Search" and click "Next".



 Select the "Floppy disk drives" box and make sure the Belkin Driver Installation Diskette has been inserted into your floppy drive. Click "Next".



 Windows<sup>®</sup> will find the drivers for "Belkin F5U012(P) USB Bay Serial Interface Controller". Click "Next".

- 5. Windows<sup>®</sup> will install the Belkin F5U012(P) USB Bay Serial Interface Controller driver. Click "Finish".
- 6. Windows® will detect "USB Device". Click "Next".
- 7. Leave on "Search for the best driver for your device (Recommended)".
- Select the "Floppy Disk Drives" box, make sure your Belkin Windows<sup>®</sup> 98 Driver disk is still in your floppy disk drive and click "Next".



- 9. Windows<sup>®</sup> will find the drivers for "Belkin F5U012(P) USB Bay Parallel Interface Controller". Click "Next".
- Windows<sup>®</sup> will install the Belkin F5U012(P) USB Bay Parallel Interface Controller drivers. Click "Finish".
- 11. Windows<sup>®</sup> will detect "Serial on USB Port", and will automatically install the proper drivers.

Driver Installation is now complete.

To verify that the drivers are loaded, right-click on "My Computer" and select properties. Click on the "Device Manager" tab and you will see the device list as shown below. The encircled devices are parts of the ExpressBus<sup>™</sup> Plus.



### Features and Usage

#### Built-in 3-Port Hub

The built-in 3-Port hub of the ExpressBus<sup>™</sup> Plus functions as any other USB Hub. Simply plug in any USB device and Windows<sup>®</sup> will automatically recognize the device and configure the drivers.

Each downstream port supports both full-speed and low-speed devices. Each port can provide a maximum of 500mA of current as long as the power adapter is connected to the ExpressBus<sup>™</sup> Plus.

The ExpressBus<sup>™</sup> Plus also features Overcurrent Protection and Auto Recovery. If a USB device plugged into the ExpressBus<sup>™</sup> Plus draws more than 500mA of current, Overcurrent Protection shuts off all power to the faulty downstream port and changes the appropriate LED color to red. When the faulty device is unplugged from the ExpressBus<sup>™</sup> Plus, the Auto Recovery feature automatically resets the Overcurrent Protection and in approximately 5 seconds, the LED is green again and the port is free to be used.

#### Parallel Printer Port

The Parallel Printer Port of the ExpressBus<sup>™</sup> Plus allows you to connect any parallel printer to your computer, without using up the current parallel port. All you need is a standard printer cable.

If you are connecting a new printer to the ExpressBus<sup>™</sup> Plus AFTER the ExpressBus<sup>™</sup> Plus drivers have been installed, be sure to select the correct port. "PB1284-1" is the Parallel Printer Port of the ExpressBus<sup>™</sup> Plus:

1	Click the port you want to use with this printer, and then click Next. Available ports:
	CDIM1: Communications Port CDIM2: Communications Port CDIM3: Sensition USB Port PLE: Dealess at like on dalk LPT1: Period Port Ref1621-1 USB Fort
	Configure Port
	( Back Next ) Cascel

#### Features and Usage (continued)

If your printer has been installed previously on the local parallel port of your computer (LPT1 – the one on the back of your machine), you can now free up that parallel port and connect your printer to the ExpressBus<sup>™</sup> Plus. To do that, you must tell Windows<sup>®</sup> that the printer is attached to a new port. Click on "Start", select "Settings" and right-click on your printer. Choose "Properties" and click on the "Details" tab:

HP DeskJet Properties	? ×	
General Details Paper Graphics Fonts I	Device Options	
HP DeskJet		
Print to the following port:		
PB1284-1 (USB Port)	Add Port	
Print using the following driver	Delete Port	
HP DeskJet	Ne <u>w</u> Driver	
Capture Printer Port End Capture		
Timeout settings		
Not selected: 15 seconds		
Transmission retry: 45 seconds		
Spool Settings Port Settings		
OK Cance	el <u>Apply</u>	

In the "Print to the following port:" box, make sure you select "PB1284-1". Click on OK to save your settings.

#### Features and Usage (continued)

Some printers may not function correctly because their drivers are expecting a true LPT port for communication. If you encounter problems with bi-directional communication, check to see if your printer driver allows you to DISABLE bi-directional communication. You can do this also by clicking on "Start", select "Settings" then right-click on your printer, choose "Properties" and then the "Details" tab. Then, click on "Spool Settings":

Spool Settings		? ≍
Spool print jobs so program finishes printing faster		
C Start printing after last page is spooled		
Start printing after first page is spooled		
C Print directly to th	e printer	
Spool data <u>f</u> ormat:	RAW	•
C Enable bi-directio	nal support for this print	er
Djsable bi-direction	nal support for this print	er
ОК	Cancel	Restore <u>D</u> efaults

Click on "Disable bi-directional support for this printer" then click OK. If it is grayed out, then your printer driver does not support bi-directional communication in the first place.

You can also try replacing the current printer driver with a Raster or Output-only driver. This can be obtained from your printer manufacturer's web site, or from their technical support.

#### Features and Usage (continued)

IMPORTANT NOTE:

THE PARALLEL PRINTER PORT OF THE ExpressBus<sup>™</sup> Plus IS DESIGNED TO BE USED AS OUTPUT-ONLY FOR PARALLEL PRINTERS. OTHER PARALLEL DEVICES SUCH AS REMOVABLE-MEDIA DRIVES, SCANNERS, CD-ROMS AND CAMERAS CANNOT COMMUNICATE TO THE COMPUTER THROUGH THE THIS PORT.

Hence, it is preferable to have your printer connected to the Parallel Printer Port of the ExpressBus<sup>™</sup> Plus and other nonprinter parallel devices to the LPT1 parallel port at the back of your computer. If you have more than one printer and still need the LPT1 parallel port to connect to a non-printer device, obtain Belkin Components USB Parallel Printer Adapters and connect all your printers to the USB ports of the ExpressBus<sup>™</sup> Plus. Out of USB ports? Just get a Belkin Components ExpressBus<sup>®</sup> 4-Port or 7-Port Hub, and give your computer more USB ports to connect with!

#### **USB Serial Port**

The Serial Port of the ExpressBus<sup>™</sup> Plus gives your system a fully functional serial port for Windows<sup>®</sup> capable of speeds of up to 115.2kbps. Any serial device will function normally in Windows<sup>®</sup> applications through the ExpressBus<sup>™</sup> Plus Serial Port.

Note: There is no DOS-box support for the serial port. This means DOS applications running over Windows<sup>®</sup> will not be able to access serial devices connected to the serial port of the ExpressBus<sup>™</sup> Plus. For these situations, obtain a Belkin Components USB Serial Adapter, Part# F5U003.

# **USB Serial Port**

Certain serial mice may not function properly through the ExpressBus<sup>™</sup> Plus Serial Port.

The most important part about making sure a serial device will work on your computer is to be certain that you have the correct serial cable. External modems require a straight-through cable, while serial printers require a crossed cable.

Connecting serial devices to the ExpressBus<sup>™</sup> Plus requires you to indicate to the software the correct serial port. For instance, when installing an external modem, be sure to select the "Serial on USB" port as shown below:



### USB Serial Port (continued)

If your modem has already been installed previously on one of the serial ports on the back of your PC and you wish to connect it now to the ExpressBus<sup>™</sup> Plus, you will have to change the port setting. To do this, click on "Start", "Settings", "Control Panel" and double-click on "Modems". Click on your modem and click on the "Properties" button:

Standard 56000 bps K56Flex Modem Properties 🛛 🕐 🗙
General Connection
Standard 56000 bps K56Flex Modem
Port: Serial on USB (COM3)
Speaker volume
Off High
Maximum speed
115200
☐ <u>O</u> nly connect at this speed
OK Cancel

### USB Serial Port (continued)

In the "Port:" box, change the setting to "Serial on USB". Click on OK to save your settings. Now your modem communicates through the ExpressBus<sup>™</sup> Plus Serial Port and the serial ports on the back of your computer are free to connect to other serial devices.

Still need more serial ports? Grab yourself Belkin Components USB Serial Adapters (Part# F5U003) and ExpressBus<sup>™</sup> Hubs (4-Port is F5U001 and 7-Port is F5U010). Adding serial ports is as easy as plugging in a cable!

### Information

#### **FCC Statement**

#### DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Belkin Components, of 501 West Walnut Street, Compton CA 90220, declare under our sole responsibility that the product:

F5U012

to which this declaration relates:

Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### CE Declaration of Conformity

We, Belkin Components, declare under our sole responsibility that the F5U012, to which this declaration relates, is in conformity with Generic Emissions Standard EN50081-1 and with Generic Immunity Standard EN50082-1 1992.

#### Belkin Components Limited Lifetime Product Warranty

Belkin Components warrants this product against defects in materials and workmanship for its lifetime. If a defect is discovered, Belkin will, at its option, repair or replace the product at no charge provided it is returned during the warranty period, with transportation charges prepaid, to the authorized Belkin dealer from whom you purchased the product. Proof of purchase may be required.

This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication; if the product has been modified without the written permission of Belkin; or if any Belkin serial number has been removed or defaced.

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